

SN. 09/876,179

ATTORNEY DOCKET NO. WATA:012

REMARKS

Claims 1-10 remain pending in this application for which applicants seek reconsideration.

Amendment

Independent claim 1 has been amended to include the term --reflection--, which was inadvertently omitted in the last amendment. Applicants submit that this amendment does not change the patentability of the claimed invention, as was presented in the last reply. No new issues are presented. Accordingly, this amendment should to be entered. No new matter has been introduced.

Art Rejection

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ouderkirk (USP 6,262,842) in view of Kamiya (USP 6,317,179). Applicants traverse this rejection because the combination called for by the examiner would not have been tenable from the combination. Specifically, the combination would not have taught the claimed **reflective mirror structure**.

Claim 1 calls for a reflective mirror comprised of alternately arranged layers of first (high refractive index) transparent films and second (low refractive index) transparent films. The first layers are composed of a first dielectric material and the second transparent films are composed of a second dielectric material. At least one of the first and second transparent films is arranged such that the film thickness thereof increases progressively or decreases progressively with distance from the transparent substrate **to suppress ripples in an optical reflection spectrum or optical transmission spectrum across a visible region**.

Ouderkirk does not teach anywhere that its multilayer optical films suppress ripples in an optical reflection spectrum or optical transmission spectrum across a visible region. Indeed, column 4, lines 20-23 pointed out by the examiner merely states that they exhibit a Brewster angle that is very large or nonexistent. This does not disclose or suggest that its films suppress ripples as claimed. The examiner is urged to explain in detail how that passage in column 4 translates into suppressing ripples should the examiner maintain the same rejection.

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In rejecting the claims, the examiner apparently relies on a combination of various features from embodiments directed to a mirror and embodiments directed to a reflective polarizing element. That is, it appears that the examiner picked and chose certain features from various embodiments in an attempt to create the claimed invention, but provides no viable motivation or suggestion as to why an ordinary artisan would have made such a selection, especially when Ouderkirk specifically distinguishes that its mirror and its reflective polarizing element are structured differently:

The preferred reflective polarizing element is based on an oriented multilayer stack comprising alternating layers of two materials ... [Column 3, lines 1-3].

In the case of polarizers, the film is stretched substantially in one direction (uniaxial orientation), while in the case of reflective films the film is stretched substantially in two directions (biaxial orientation). [Column 8, lines 33-37].

In all of the given examples (Examples 1-6), Ouderkirk's multilayer film stacks, which have a thickness gradient, are formed by a feedblock method. Namely, all of these stacks are stretched and/or extruded in one or two directions. The stretching in one direction (reflective polarizing element) creates a polarization effect, regardless whether the reflective polarizing element is used as a polarizer or a mirror. In contrast, the claimed invention is directed to SUPPRESSING the occurrence of ripples in an optical reflection spectrum or optical transmission spectrum across the visible region using the specific refractive indexes and film thicknesses of the first and second transparent films. Accordingly, the stretching taught by Ouderkirk specifically teaches away from the present invention.

Kamiya would not have alleviated Ouderkirk's shortcomings noted above, even if the combination were deemed proper. Indeed, Kamiya also would not have taught providing a thickness gradient for purposes of suppressing ripples in an optical spectrum or optical transmission spectrum across a visible region in a reflective mirror.

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Conclusion

Applicants submit that claims 1-10 patentably distinguish over the applied references and thus urge the examiner to issue an early Notice of Allowance. Should the examiner have any issues concerning this reply or any other outstanding issues remaining in this application, applicants urge the examiner to contact the undersigned to expedite prosecution.


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Respectfully submitted,

LYLE KIMMS

REG. NO. 34079

RULE 34A


Marc A. Rossi

Registration No. 31,923

ROSSI & ASSOCIATES
P.O. Box 826
Ashburn, VA 20146-0826
Phone: 703-726-6020

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